

Methylphenidate Shared Care Protocol

Introduction

Treatment aims in Attention Deficit Hyperactivity Disorder (ADHD) are to reduce hyperactive behaviour, detect and treat any co-existing disorders, promote academic and social learning, improve emotional adjustment and self esteem, and to relieve family distress.

Therapeutic Use

Methylphenidate is licensed for the treatment of ADHD in the UK. It should form part of a comprehensive treatment programme for ADHD where remedial measures alone prove insufficient. A number of published studies confirm the efficacy of methylphenidate in reducing symptoms of ADHD and improving function over the short-term. Further trials of long term therapy are in progress.

Presentation and Availability

Methylphenidate is available as two brands (Ritalin[®] and Equasym[®]). It is a Controlled Drug and prescriptions must comply with full legal requirements (see BNF).

Cost

At current prices, one years treatment with methylphenidate 30mg/day costs approx. £204 per patient.

Dosage and Administration

Doses start at 5mg once or twice daily and then may be increased by dose and frequency, according to response, by increments of 5-10mg in the daily dose. Doses above 60mg daily are not recommended. If the effect of the drug wears off too early in the evening, a small evening dose may be necessary to avoid disturbed behaviour and inability to sleep.

Side-Effects

The most common side-effects reported with methylphenidate treatment in trials were insomnia, decreased appetite, stomach-ache and headache, the latter three usually mild and transient. Insomnia may be controlled by altering the dosage times. There is little evidence to suggest that long term treatment suppresses height and weight gain. *A full list of potential adverse effects are given in the BNF and Data sheet.*

Parents/carers and teachers may be given side-effect questionnaires from the specialist to enable them to monitor how the patient tolerates methylphenidate.

Drug Interactions

Methylphenidate may inhibit the metabolism of coumarin anti-coagulants, some anti-convulsants (e.g. phenobarbitone, phenytoin, primidone), tricyclic anti-depressants, and phenylbutazone-the dosage of these drugs may have to be reduced. Methylphenidate should be used in caution with patients receiving MAOI's as there is a risk of hypertensive crisis.

References

MTRAC Guidelines VS99/10 and SS99/10
British National Formulary No. 37 March 1999 Section
Data Sheet Compendium 1999-2000
Elia, J, Ambrosini, PJ, Rapoport, JL. Treatment of attention-deficit-hyperactivity disorder. *NEJM* 1999;340:780-788.

Monitoring

Patients requiring long-term therapy should be carefully monitored. The patients response to the drug is assessed by the Specialist at each clinical meeting. Parent and teacher reports on levels of activity, concentration, and other factors, are compared before and after treatment and facilitate the decision to increase the dose or stop treatment.

Height, weight, and blood pressure can be measured every 6 months and any adverse findings/trends should be notified to the specialist as soon as possible. Although methylphenidate has been shown to cause leucopenia, thrombocytopenia and anaemia (12 reports since 1964), routine full blood counts are unnecessary. A full blood count should however be done as soon as possible if any of these conditions are suspected.

Aspects of Care for which Specialist is Responsible

- Initiation and stabilisation of the patient on methylphenidate
- Communicating with GP with regards to initiation of methylphenidate, changes in treatment, and assessment of adverse events
- Provision of written guidance and questionnaire's for parents and teachers, regarding drug treatment, at specialists discretion
- Reporting adverse events to CSM

Aspects of Care for which GP is Responsible

- Prescribing methylphenidate once notified by specialist that patient is showing a response to treatment
- Monitoring height, weight, and blood pressure of the patient every 6 months and reporting adverse findings to Specialist
- Reporting of adverse events to Specialist and CSM
- Reporting to and seeking advice from the Specialists on any aspect of patient care which is of concern to the GP and may affect treatment

Aspects of Care for which Parent/Carer/Teacher is Responsible

- Completing questionnaires given by Specialist in order to report on treatment efficacy and tolerance
- Reporting of side-effects and adverse events to GP or Specialist
- To ensure they have a clear understanding of the treatment

Availability of Back-up Advice and Support

Walsall Manor Hospital	01922-721172
<i>Child & Adolescent Psychiatrists</i>	<i>01922-775000 (Ablewell House)</i>
Community Paediatricians	01922-858973 (Brace Street)
	01922-858148 (Sycamore House)
<i>Drug Information/Interface Pharmacist</i>	<i>01922-656610</i>

These guidelines have been written in collaboration with the Walsall Community Health Trust and Walsall Manor NHS Trust
Written and Approved by:- Dr. V. Rao, Consultant Community Paediatrician, Dr. P. Carter, Consultant Community Paediatrician

Dr. J. Nicholls, Consultant in Child & Adolescent Psychiatry
Mr. N. Barnes, Pharmaceutical Adviser
Dr. C. Mahenthalingam, LMC

Miss M. Argyle, Interface Pharmacist
Dr. A. Bligh, East PCG, Dr. N. Khan, North PCG
Dr. A. S. Gill, West PCG, Dr. O. Manocha, South PCG